PATSIORIN, A.; AL'TSHULLER, G., inzhener.

Rapid repair of a cracking plant. Neftianik 1 no.10:6-8 O '56.
(MLRA 9:11)

1. Glavnyy tekhnolog kreking-zavoda imeni Vano Sturua.
(Cracking process)

SOV 137-58-8-18038

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 27 (USSR)

AUTHOR: Patsiornykh, A. I.

TITLE: ~~Determination~~ of Ductile Characteristics of Steel at High Temperatures (Opredeleniye plasticheskikh kharakteristik stali pri vysokikh temperaturakh)

PERIODICAL: Tr. Leningr. voyen.-mekhan. in-t, 1957, Nr 6, pp 87-102

ABSTRACT: The possibility of extending the methods of testing metal by simple tension at normal temperature to testing them at temperatures corresponding to the temperature of hot pressure-working was investigated with the purpose of establishing the mechanical characteristics of ductility. A new apparatus with a manual mechanical gear is described permitting the distending of specimens at the temperature of forging heat at strain rates close to the rates of industrial processes of press forging. The specimen to be distended is placed in a horizontal tubular furnace, capable of heating up to 1200°C. A photograph and

Card 1/2

Determination of Ductile Characteristics of Steel at High Temperatures

drawings of the apparatus, and also the results of testing of a series of alloy steels at 800 - 1200° are given. The correctness and reliability of the method is verified by the comparison of experimental values for ψ_L with the calculated ones obtained by the empirical relationship of N. S. Kurnakov, V. P. Shishokin, and N. Frantsevich, which showed their close agreement.

Z. F.

1. Steel—Mechanical properties
2. Steel—Testing equipment
3. Steel—Temperature factors

Card 2/2

PATSIORNYKH, A.I., kand. tekhn. nauk.

Determining plastic characteristics of steel at high temperatures.
Trudy LVMI no.6:87-102 '57. (MIRA 11:5)
(Steel--Testing) (Metals at high temperatures)

PATSIORNYKH, A. I.

PA 53T85

USSR/Metals
Aluminum Alloys - Properties
Crystallization

Feb 1947

"Study of the Crystallization and Mechanical Properties of Secondary Silumin Mark AL-4 Upon Additions of Nickel, Phosphorus, and Boron," A. I. Patsiornykh, 5½ pp

"Trudy Tsent Orden Lenin Nauch Issled Institut" No 2

Discusses general conditions, objects, and methods, and results of experiments (effects of nickel, phosphorus, and boron). Nickel and phosphorous additions improve structure of alloy and mechanical properties.

LC

53T85

PATSIORY, P. P., doktor tekhn. nauk, red.; VIL'KE, G.A., kand.tekhn. nauk, red.; ZARAPINA, Ye.Ye. otv. za vypusk; KARAVASHKIN, S.I., otv. za vypusk; TIKHOMIROVA, V.R., red.

[Establishment and operation of automatic and semiautomatic lines in forest and wood-using industries] Ustroistvo i ekspluatatsiia avtomaticheskikh i poluavtomaticheskikh linii v lesnoi i derevoobrabatyvaiushchei promyshlennosti. Moskva, GOSINTI, 1962. 172 p. (MIRA 16:8)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennyy komitet po koordinatsii nauchno-issledovatel'skikh rabot.
(Wood-using industries) (Automatic control)

MA

Properties of Alloys - c

"Study of Crystallization and Mechanical Properties of Secondary Silumin Al 4 as Affected by Addition of Nickel, Phosphorus, and Boron. A. I. Patonomykh (*Trudy Tsentral. Nauch.-Issledovatel. Inst., Ministerstvo Sudostroit. Prom. S.S.S.R.*, 1947, 7, (2), 25-30). *C. Abs.*, 1951, 45, 1940). (In Russian). The secondary Silumin used in these tests contained Si 8.5-10.5, Mg 0.17-0.30, Mn 0.25-0.50, Cu < 0.5, Fe 0.7%, balance Al. Before testing, the specimens were soln.-treated, water-quenched from 525°-530° C., and artificially aged at 185°-190° C. for 5 hr. In ordinary Silumin of this kind Si appears as round or elongated grey inclusions in the white matrix of a solid soln. 0.1% Ni caused the Si to appear in a needle-like form, but its distribution remained uneven. 0.3% Ni improved the structure and decreased the size of the Si particles; 0.5% Ni decreased the size of the Si inclusions still further, but its distribution became uneven again and porosity appeared. 1% Ni coarsened the structure considerably and caused the segn. of Fe Si constituents and Al Ni compounds. Thus, the optimum Ni range was 0.1-0.5%. P affected the crystn. of Silumin markedly; 0.016% imparted a fine cryst. form. Raising the P content to 0.032-0.08% somewhat coarsened the structure, but at 0.6% P, Si crystals appeared as cracked plates with uneven edges, and porosity became evident. A P content above 0.048% affected the mech. properties adversely. The range of beneficial effect of P was therefore 0.016-0.048%. B under conditions of these tests did not show any beneficial effect on Silumin. More extensive study is needed for drawing reliable conclusions.

CA

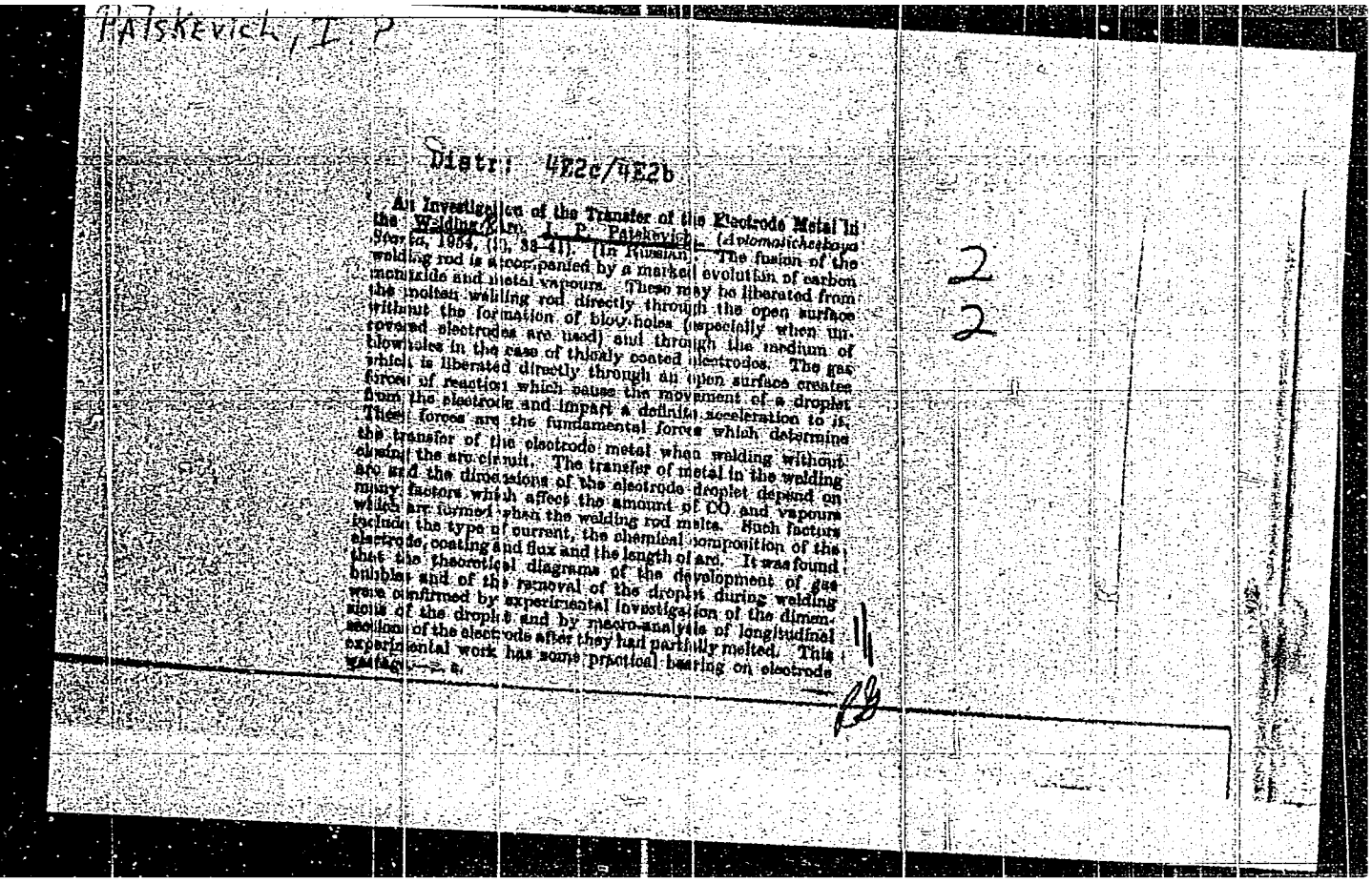
9

Study of crystallization and mechanical properties of secondary silumin. Al 4 as affected by addition of nickel, phosphorus, and boron. A. I. Patsiornykh. *Trudy Tsentral Nauch.-Issledovatel. Inst., Ministerstvo Sudo-stroitel. Prom. S.S.S.R.* 7, No. 2, 25-30(1947). The secondary silumin used in these tests contained Si 8.5-10.5, Mg 0.17-0.30, Mn 0.25-0.50, Cu ≤ 0.5, Fe 0.7%, and the rest Al. Before testing the specimens were heat-treated, water-hardened from 525-530°, and artificially aged at 185-190° for 5 hrs. In ordinary silumin of this kind Si appears as round or elongated gray inclusions on the white background of a solid soln. Ni 0.1% caused the Si to appear in a needlelike form but its distribution remained uneven. Ni 0.3% improved the structure and decreased the size of Si whereas 0.5% of Ni decreased the size of Si inclusions still further but its distribution became uneven again and porosity appeared. Ni 1% coarsened the structure considerably and caused the sepn. of Fe-Si structural units and chem. Al-Ni compds. Thus, the optimum range of Ni was 0.1-0.5%. P affected the crystn. of silumin markedly. P 0.016% imparted a fine cryst. form. Raising the P content to 0.032-0.06% coarsened somewhat the structure but at 0.0% P, Si crystals appeared as cracked plates of uneven edges, and porosity became evident. Raising the P content above 0.048% affected the mech. properties adversely. The range of beneficial effect of P was therefore 0.016-0.048%. B under conditions of these tests did not show any ameliorating effect on silumin. More extensive study is needed for drawing reliable conclusions. M. Hosch

PATSIYEVSKIY, A.K., elektromekhanik

Control of the buzzer signal. Avtom.telem.i sviaz' 3 no.10: 33 O '59. (MIRA 13:2)

1. Simferopol'skaya distantsiya signalizatsii i svyazi Stalinskoy dorogi.
(Telephone, Automatic)



PAISKEVICH, I. P.

Distr: 4E2c/4E2b

An Investigation of the Transfer of the Electrode Metal in the Welding Arc. I. P. Paiskevich. (*Avtomaticheskaya Svarka*, 1954, (1), 33-41). (In Russian). The fusion of the welding rod is accompanied by a marked evolution of carbon monoxide and metal vapours. These may be liberated from the molten welding rod directly through the open surface without the formation of blow-holes (especially when uncoated electrodes are used) and through the medium of which is liberated directly through an open surface creates forces of reaction which cause the movement of a droplet from the electrode and impart a definite acceleration to it. These forces are the fundamental forces which determine the transfer of the electrode metal when welding without using the arc circuit. The transfer of metal in the welding arc and the dimensions of the electrode droplet depend on many factors which affect the amount of CO and vapours which are formed when the welding rod melts. Such factors include the type of current, the chemical composition of the electrode, coating and flux and the length of arc. It was found that the theoretical diagrams of the development of gas bubbles and of the removal of the droplet during welding were confirmed by experimental investigation of the dimensions of the droplet and by macro-analysis of longitudinal section of the electrode after they had partially melted. This experimental work has some practical bearing on electrode

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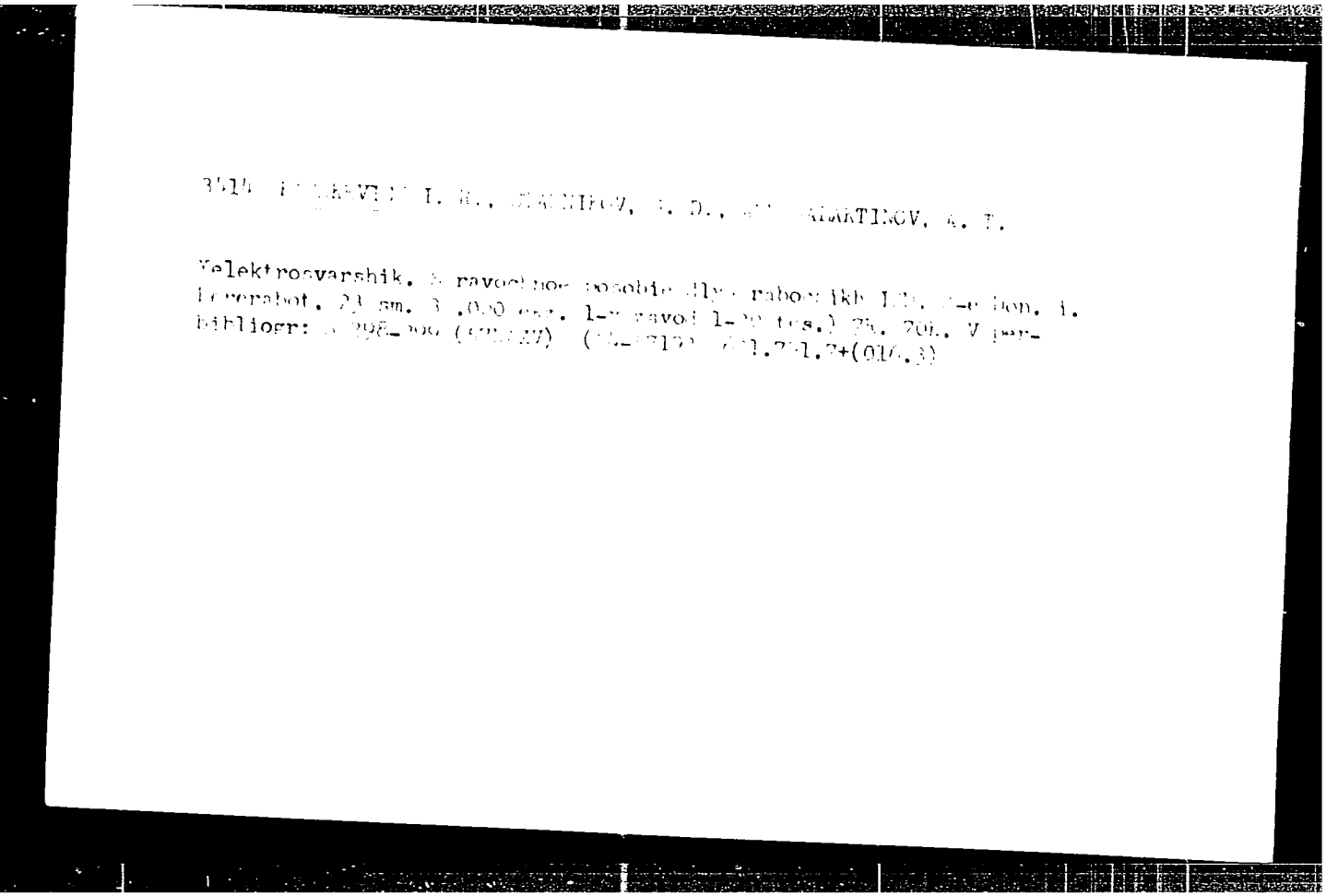
GALAKTIONOV, A.T., kandidat tekhnicheskikh nauk; PAPSKEVICH, I.P.
STAINIKOV, G.D.: LUGINA, N.A., tekhnicheskiy redaktor.

[Electric welder; handbook for workers] Elektrosvarshchik; spravochnoe posobie dlia rabochikh. Izd.2-3, dop. i perer. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 303 p.
(Electric welding) (MLRA 8:8)

ANDRYUSHCHENKO, Yu.S., BAGIN, Yu.I., BASHKIRTSEV, A.A., BELEN'KOV, G.Ye., BELINICHER, I.Sh., BUSHUYEV, N.M., VAGANOV, A.K., GASHEV, A.M., YBS'KOV, K.A., ZGIRSKIY, Ch.I., IGNAT'YEV, M.I., KORUSHKIN, Ye.N., KUZ'MOV, N.T., PATSKEVICH, I.P., PICHAK, F.I., RAYTSES, V.B., RUDAKOV, A.S., SAFRYKIN, V.M., SIDOROV, F.F., UMINSKIY, Ye.A., KHANZHIN, P.K., CHERNOVSKIY, Yu.I., BUSHUYEV, N.M., kand.tekhn. nauk, red.; DUGINA, N.A., tekhn.red.

[Manual for agricultural machinery operators] Pt. 3. Stationary internal combustion engines, steam engines and windmills. Rural electrification. Mechanization of production in animal husbandry. Spravochnik mekhanizatora sel'skogo khoziaistva. Pt. 3. Statsionarnye dvigateli vnutrennego sgoraniia, lokomobili i vetrodvigateli. Elektrifikatsia sel'skogo khoziaistva. Mekhanizatsiia proizvodstvennykh protsessov v zhivotnovodstve. Pod red. N.M. Bushueva. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry. 1957. 200 p. (MIRA 11:3)

(Agricultural machinery)



PATSKEVICH, I.R., dotsent, kandidat tekhnicheskikh nauk; SHAKHMATOV, V.M., inzhener

Study of butt resistance welding of cast iron. Svar. proizv. no.5: 1-4 My '55. (MLRA 8:9)

1. Chelyabinskiy politekhnicheskiy institut.
(Cast iron--Welding) (Cast iron--Metallography)

Patskevich, I. R.

Distr: 4E4j

The causes and prevention of destruction of lacquer films in the region of weld seams. P. N. Berezkin, I. R. Patskevich, and V. A. Baulina. *Tekhnol. Transport. Mashinostroeniya* 1955, No. 5, 23-7; *Referat. Zhur., Met.* 1956, Abstr. No. 8080.—A white film formed near weld seams consisted mainly of Na and K carbonates and bicarbonates. In the process of welding Na_2O and K_2O are evapd. into the arc atm., and condense upon the surface of the metal near the seam. The oxides react with the moisture and CO_2 in the air to form the carbonates and bicarbonates. These attack to form lacquers contg. alkyd resins, with formation of glycerol and Na and K phthalates. The extent of the destruction of the lacquer depends on the type of electrodes, on the atm. medium, and on extreme changes in temp. of the surrounding air. The alk. deposits can be removed from the metals before lacquering by sand-blasting, neutralizing with 5% soln. of H_3PO_4, or washing with hot water. The last is the most effective method. A. N. Pestoff

PATSKEVICH, I.R., kandidat tekhnicheskikh nauk; SHAKHMATOV, V.M., inzhener.

Resistance butt welding of cast iron. Vop.svar.proizv. no.7:5-13 '55. (MLRA 10:3)
(Cast iron--Welding) (Electric welding)

PATSKEVICH, I.R., kandidat tekhnicheskikh nauk.

Causes for unsatisfactory melting of certain batches of electrode wire. Vop.svar.proizv. no.7:48-54 '55. (MLRA 10:3)
(Electrodes--Quality control)

PATSKEVICH, I.R., kandidat tekhnicheskikh nauk; KLOCHKOV, A.I.; BEREZKIN, P.N., inzhener; BAUTINA, V.A.; SHAKHMATOV, V.M.

Investigating the causes of paint deterioration in the vicinity of welds. Vop.svar.proizv. no.7:82-93 '55. (MLRA 10:3)
(Paint) (Tractors--Welding)

SOV-137-57-11-21690

Translation from: Referativnyy zhurnal, Metallurgiya, 1957 Nr 11 p 150 (USSR)

AUTHORS: Patskevich, I. R., Kulikov, G. D., Pinchuk, I. S.

TITLE: An Investigation of the Process of Hardfacing by Means of Automatic Vibrating-electrode Arc Welding (Issledovaniye protsessa avtomaticheskoy vibrodugovoy naplavki)

PERIODICAL: V sb.: Vosstanovleniye iznoshennykh detaley avtomat vibrodugovoy naplavkoy. Chelyabinsk, 1956, pp 64-98

ABSTRACT: A study of oscillograms of current and voltage conditions in the course of hardfacing operations performed with the aid of vibrating electrodes demonstrated that this process is essentially an arc process. It differs from standard arc-welding hardfacing procedures only with regard to the employment of vibrating electrodes and a cooling fluid; therefore, it would be more correct to refer to it as a vibrating-electrode arc-welding method (VEAW). Oscillograms indicate that every electrode vibration includes a period of electric arc discharge, an idle period, and a short-circuit period. The greater part of the heat energy (82-94.3%) is generated during the

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An Investigation of the Process of Hardfacing (cont.)

period of the arc discharge. The idle period has an adverse effect upon the fusion characteristics of the electrode and the quality of bonding between the deposited metal and the parent metal. Idle periods may be eliminated by employing a welding generator as a source of power. In order to stabilize the process it is desirable that generators with good "surge-and-dip" characteristics be utilized. Reverse polarity must be employed during VEAW. The vibration of the electrode ensures the stability of the process by providing frequent excitation of the arc discharge (100 per second). In addition, the vibration causes the electrode metal to be transferred in small quantities (at the instant when the electrode contacts the component) thus favorably affecting the formation of beads. The cooling fluid reduces the effects of heat on the component, increases the rate of cooling of the metal, and protects the molten metal from the action of air. The selection of the area on the component to which the coolant is supplied and the manner in which this is accomplished are factors of great importance. The process of propagation of heat in the parent metal during VEAW may be schematically described by the action of a rapidly moving point source of heat traveling along the surface of a semi-infinite body. Structural changes occurring during VEAW essentially do not differ from changes taking place in a heat-affected zone during standard arc-welding procedures.

SOV-137-57-11-21690

An Investigation of the Process of Hardfacing (cont.)

Large temperature gradients and high rates of cooling in the process of VEAW favor the formation of hardened structures, which frequently results in cracking of the heat affected zone

V K

Card 3/3

PATSKEVICH, I.R., kandidat tekhnicheskikh nauk; BAUTINA, V.A., inzhener; BEREZKIN, P.N., inzhener.

Causes for the destruction of paint around welded seams. Sel'khozmashina no.2:25-28 F '56. (MLRA 9:5)

1. Chelyabinskiy politekhnicheskiy institut (for Bautina);
2. Chelyabinskiy traktornyy zavod imeni Staline (for Berezkin).
(Tractors--Painting)

AID P - 5053

Subject : USSR/Engineering-Welding

Card 1/2 Pub. 107-a - 2/9

Authors : Patskevich, I. R. and G. D. Kulikov, (Chelyabinsk Polytechnic Institute).

Title : Research in automatic arc bonding by vibrating electrodes and the implementation of this method.

Periodical : Svar. proizv., 5, 6-12, My 1956

Abstract : A new method of bonding certain machine parts of machines (tractors) by vibrating electrodes was developed sometime in 1951-52 at the Chelyabinsk Tractor Plant. However, this metal-arc overlay process has several shortcomings. The authors of this article, in the course of their investigation, have evolved a somewhat different and more efficient process of automatic metallization which they call "vibrating arc bonding". This is described and illustrated here, with reference

ANDRYUSHCHENKO, Yu.S.; BAGIN, Yu.I.; BASHKIRTSEV, A.A.; BELEN'KOV, G.Ye.; BELINICHER, I.Sh.; BUSHUYEV, N.M.; VAGANOV, A.K.; GASHEV, A.M.; YES'KOV, K.A.; ZGIRSKIY, Ch.I.; IGANT'YEV, M.I.; KOKUSHKIN, Ye.N.; KUZ'MOV, N.T.; PATSKEVICH, I.R.; PICHAK, F.I.; PAYTSES, V.B.; RUDAKOV, A.S.; SAPRYKIN, V.M.; SIDOROV, F.F.; UMINSKIY, Ye.A.; KHANZHIN, P.K.; CHERNOMOVSKIY, Yu.I.; YERAKHTIN, D.D., kand. tekhn. nauk, retsenzent; MAKAROV, M.P., inzh., retsenzent; TORBEYEV, Z.S., kand. tekhn. nauk, retsenzent; POLKANOV, I.P., kand. tekhn. nauk, retsenzent; IGNAT'YEV, M.G., agronom, retsenzent; GUTMAN, I.M., inzh., retsenzent; YERMAKOV, N.P., tekhn. red.; SARAFANNIKOVA, G.A., tekhn. red.

[Reference manual for the agricultural machine operator] Spravochnik mekhanizatora sel'skogo khoziaistva. Pt.2. [Repair of tractors and agricultural machinery] Remont traktorov i sel'skokhoziaistvennykh mashin. Pod red. N.M. Bushueva. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry. 1957. 335 p. (MIRA 11:9)
(Agricultural machinery--Maintenance and repair)

ANDRYUSHCHENKO, Yu.S.; BAGIN, Yu.I.; BASHKIRTSEV, A.A.; BELEN'KOV, G.Ye.; BELINICHER, I.Sh.; BUSHUYEV, N.M.; VAGANOV, A.K.; GASHEV, A.M.; YES'KOV, K.A.; ZGIRSKIY, Ch.I.; IGNAT'YEV, M.I.; KORUSHKIN, Ye.N.; KUZ'MOV, N.T.; PATSKEVICH, I.R.; PICHAK, F.I.; RAYTSES, V.B.; RUDAKOV, A.S.; SAPRYKIN, V.M., SIDOROV, F.P.; UMINSKIY, Ye.A.; KHANZHIN, P.K.; CHERNOVSKIY, Yu.I.; YERAKHTIN, D.D., kand.tekhn.nauk; retsenzent; MAKAROV, M.P., inzh.,retsenzent; TORBEYEV, Z.S., kand. tekhn.nauk, retsenzent; POLKANOV, I.P., kand.tekhn.nauk, retsenzent; IGNAT'YEV, M.G., agronom, retsenzent; GUTMAN, I.M., inzhener, retsenzent; SARAFANNIKOVA, G.A., tekhn.red.; YERMAKOV, N.P., tekhn.red.

[Manual for agricultural mechanizers] Spravochnik mekhanizatora sel'skogo khoziaistva. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry. Pt.1. [Tractors and automobiles, agricultural machinery and implements, and operation of machine and tractor yards] Traktory i avtomobili, sel'skokhoziaistvennye mashiny i orudiia, ekspluatatsiia mashinno-traktornogo parka. Pod. red.N.M.Bushueva. 1957. 462 p. (MIRA 10:12)

(Machine-tractor stations)

PATSKEVICH, Ivan Romanovich; BEREZKIN, P.N., dotsent, retsenzent; GARMASH, L.Ye., inzh., retsenzent; FROLOV, B.L., inzh., red.; DUGINA, N.A., tekhn.red.

["Vibration-arc" built-up welding] Vibrodugovaia naplavka. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1958. (MIRA 12:5)
(Electric welding)

[illegible] 3

AUTHORS: [illegible], Candidate of Technical Sciences, [illegible] V. [illegible], and [illegible], Engineers

TITLE: Vibrating Arc [illegible] tric [illegible] Shafts [illegible] vaya [illegible]

PERIODICAL: [illegible], Nr [illegible]

ABSTRACT: The authors state that [illegible] shafts repaired [illegible] the Stalinsk [illegible] wer plant were made of [illegible] steel and have [illegible] journals of different types. Their wear is [illegible] mm [illegible] the side. In [illegible], the chair of welding at the [illegible] abinsk Polytechnic [illegible] and the Stalinsk [illegible] energo-zavod (Stalinsk Power Plant) started collaborating in the introduction and improvement of vibro-arc welding as applied to the repair of worn out parts of electric motors. The plant assembled two special vibro-arc devices. Their arcs were fed by welding converters of the [illegible] type. A series of tests showed the preferable qualities of the Sv-[illegible] Sv-[illegible] welding rods of [illegible] diameter, ensuring good quality of weld metal, free from cracks, with a hardness of [illegible]. Electrode vibration has a great effect on the stability of the welding process. [illegible] re-[illegible] by [illegible] voltage oscillations, and ensure a high [illegible] of the process. This [illegible]

Card 1/[illegible]

[illegible] 23

Vibrating Arc Welding of Electric Motor Shafts

[illegible] v, under the following conditions: [illegible] the rate of electrode wire [illegible], the longitudinal [illegible] the electrode [illegible], the consumption of refrigerating [illegible] of calcined soda [illegible] electrode vibration [illegible] weld layer must be [illegible]. Experience has shown that consumption of [illegible] arc welding is [illegible] to [illegible].6 times lower than that of the hand-[illegible] arc, and as a result [illegible] the repair of worn-out [illegible] the application of this [illegible] figure and shafts [illegible] Soviet references.

ASSOCIATION: Chelyabinskiy [illegible] Stalinskiy Energozavod (Stalinskiy Power Equipment Plant)

AVAILABLE: Library of Congress

Card 2/2 1. Shafts-Welding 2. Arc welding-Vibration processes

SOV/2280

PHASE I BOOK EXPLOITATION

25(1)

Chelyabinsk. Politekhnicheskiy institut

Voprosy svarochnogo proizvodstva (Problems in Welding) Moscow, Mashgiz, 1959. 92 p. (Series: Its: Sbornik, No. 16). 6,000 copies printed.

Reviewers: F.I. Boykov, Engineer, A.G. Menzenkampf, I.I. Vinnik, N.A. Klykov, N.A. Karpova, N.I. Andrianov, V.M. Solovskoy, L.Ye. Garmash, and N.M. Yegorov, Docent; Ed. (Title page): K.A. Yes'kova, Docent; Ed. (Inside book): A.G. Kozlov; Tech. Ed.: N.A. Dugina; Exec. Ed. (Ural-Siberian Division, Mashgiz): A.V. Kaletina, Engineer.

PURPOSE: This collection of articles is intended for engineers, technicians and scientific workers.

COVERAGE: This is a compilation of articles written by scientific workers of the Department of Welding Processes and Equipment of the Chelyabinsk Polytechnical Institute. The articles deal with little developed or entirely new problems of practice and theory of welding. The articles cover weldment deformation, welding of strips

Card 1/4

Problems in Welding

made of resistance alloys, resistance welding of cast iron to steel, bronze welding, and some problems of vibroelectric arc automatic surfacing by welding, and the method of testing for weldability of thin sheet carbon steel, etc. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

Problems in Welding SOV/2280

The authors present the results of an investigation of the application of butt welding to ohmic and scale-resistant chromium-nickel alloy strips.

Yes'kov, K.A., Docent. The Problem of the Weldability of Bronzes 80
The author presents the results of his experimental investigation of electric arc welding of various types of bronzes using coated copper electrodes.

Baritina, V.A., Engineer. Investigating the Transfer of Basic Element Oxides From Coating Into the Slag and the Gas Phase 89
The author carried out experiments to determine the coefficients of transfer of alkalioxides into slag and gas phase in order to make possible the calculation of ionization of arc gases of the corresponding arc temperature and the cathode voltage drop during welding.

AVAILABLE: Library of Congress

GO/bg
10-8-59

Card 4/4

SOV/125-59-8-15/15

19(8) AUTHOR: Patskevich, I.R.

TITLE: The Second Scientific-Production Conference on Vibro-Arc Fusion

PERIODICAL: Avtomaticheskaya svarka, 1959, Nr 8, pp 94-95 (USSR)

ABSTRACT: This item is a report on a conference devoted to the results of researches on and introduction of a method of automatic vibro-arc welding of components. The meeting was held in Chelyabinsk on 14-18 April, 1959, and called by the welding section of the Chelyabinsk NTO-Mashprom and TsBTI of the Chelyabinsk sovnarkhoz About 170 representatives of 72 organizations, including 11 VUZy (higher educational institutions) and 10 scientific-research and project institutes and construction offices, took part. Participants heard and discussed 21 reports, and visited the ChTZ, the welding laboratory of the Chelyabinskiy politekhnicheskiy institut (Chelyabinsk Polytechnic Institute) (ChPI), and the technical station of the palace of culture a the Zavod imeni S. Ordzhonikidze (Works imeni S. Ord

Card 1/6

The Second Scientific-Production Conference on Vibro-Arc Fusion

zhonikidze), where they familiarized themselves with the work of these organizations in the field of vibro-arc fusion. O.A. Bakshi, Chairman of the provincial (oblast') metal welding section of the Chelyabinsk NTOMashprom and Candidate of Technical Sciences, reported on implementation of the decisions of the first conference on vibro-arc fusion which took place in November, 1956, and on the problems of the further development of this means of parts renovation. P.N. Berezkin, Docent at the ChPI, reported on the state of research, fields of application, and ways of developing the method of fusion with a vibrating electrode. G.P. Klekovkin, Engineer, spoke on the basic stages in research on this method of fusion, and the KM-5 and KUMA-5 fusing heads developed by the Works imeni S. Ordzhonikidze and the Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (Chelyabinsk Institute for Mechanization and Electrification of Agriculture) (ChIMESKh), and experiments in the fusion laboratories of the Nauchno-issledovatel'-

The Second Scientific-Production Conference on Vibro-Arc Fusion

skiy institut tekhnologii mashinostroyeniya chelyabinskogo sovnarkhoza (Scientific-Research Institute of the Technology of Machine Construction of the Chelyabinsk Sovnarkhoz). B.A. Smirnov and V.S. Nasonov, Aspirants of the ChIMESKh, reported on the results of research on the formation of cracks during vibro-arc welding, on experiments in the alloying of the fused deposit through a liquid, and on fusion with alternating current. I.R. Patskevich, Candidate of Technical Sciences (ChPI), reported on results in research on the physical nature of vibro-arc fusion, on research of this process with the aid of high speed photography, research on the characteristics of current sources for feeding an arc, and research on the influence of several factors on the formation of cracks in the fused deposit. V.B. Shlyapin of the TsNII of railway transport reported on the results of studies of vibro-arc fusion in a jet of cooling liquid, and of flux fusion by vibrating arc as applied to the renovation of parts in railway transport rolling stock.

SOV/125-59-8-15/18

The Second Scientific-Production Conference on Vibro-Arc Fusion

The report of K.V. Frolov, Candidate of Technical Sciences, and N.S. Demidovich, Engineer at the Dnepropetrovskiy gorniy institut (Dnepropetrovsk Mining Institut), was devoted to the result of research on and introduction of vibro-arc fusion in the renovation of worn-out parts of coal mining machinery. Obruchnikov, Aspirant at the Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (Moscow Institute for the Mechanization and Electrification of Agriculture) dwelled on general questions of the electro-impulse processing of metals and the prospects of using pulse generators for fusion. V.A. Bautina (ChPI) spoke on the work of the ChPI and the Chelyabinskiy avtoremontniy zavod (Chelyabinsk Auto-Repair Works) in the study and planning of vibro-arc heads, particularly the VDG-5 head and fusing conditions using this head and a wire of 3 mm in diameter. A.A. Spiridonov, Candidate of Technical Sciences (UPI), reported on the new VG-1, VG-2, and VG-3s vibro-arcs, and research on fusion with R-9 wire in a carbonic gas medium N.I.

Card 4/6

The Second Scientific-Production Conference on Vibro-Arc Fusion

Dotsenko, Candidate of Technical Sciences, reported on conditions and the technology of welding crankshafts and other automobile parts with a vibrating electrode as worked out in the Nauchno-issledovatel'skiy institut aviatsionnoy tekhnologii (Scientific-Research Institute of Aviation Technology) and on experiments in multi-electrode fusion by this method. A number of works representatives reported on experience in production application of vibro-arc fusion in the renovation of automobile parts, electric motor parts, ship machinery, etc. In a resolution passed by the convention it is recommended that wider use be made of vibro contact fusion for the renovation of parts in industrial, transport and construction enterprises, sovkhozy and RTSs. The conference suggested that the GNTK of the Council of Ministers of the RSFSR organize planning, testing of experimental samples, and serial production of heads for vibro-arc welding. The conference also passed a number of other resolutions aimed

Card 5/6

at the development and further expansion of the application of vibro-arc fusion.

PATSKEVICH, I.R., kand. tekhn.nauk

Investigating the structure and hardness of metals in hard facing with a weaving arc. [Sbor. st.] CHIPI no.16:14-33 '59.
(MIRA 12:9)

(Hard facing--Testing) (Electric welding--Testing)

PINCHUK, I.S., kand. tekhn. nauk; PATSKEVICH, I.R., kand. tekhn. nauk

Investigating the stability of the automatic weaving-arc hard facing process. [Sbor. st.] CHIPI no.16:34-44 '59.
(MIRA 12:9)
(Hard facing--Testing) (Electric welding--Testing)

PATSKEVICH, I.R., kand. tekhn. nauk; SHAKHMATOV, V.M., inzh.

Investigating the resistance butt welding of cast iron with steel. [Sbor. st.] CHIPI no.16:56-67 '59. (MIRA 12:9)
(Electric welding--Testing) (Cast iron--Welding)
(Steel--Welding)

L 38486-66 EWT(d)/EWT(m)/T/EWP(v)/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) IJC/HM/JD

ACC NR: AP6019428 (A) SOURCE CODE: UR/0135/66/000/006/0018/0020

AUTHOR: Patskevich, I. R. (Candidate of technical sciences); Popkov, A. M. (Engineer) 51

ORG: Chelyabinsk Polytechnic Institute (Chelyabinskiy politekhnicheskiy institut)

TITLE: Determination of the static characteristics of a system for the automatic control of the welding process with short circuiting of the arc

SOURCE: Svarochnoye proizvodstvo, no. 6, 1966, 18-20

TOPIC TAGS: automatic welding, automatic control design, arc welding

ABSTRACT: The article presents experimental and theoretical material on the determination of the characteristics of a system for the automatic control of processes of automatic welding and beading, with systematic short circuiting of the arc gap, and with vibrating and non-vibrating electrodes. The process of welding and beading with short circuiting of the arc is accompanied by changes in the voltage and the current in the circuit. Therefore, the characteristics are constructed with respect to the average voltage between the electrode and the piece, called the

Card 1/2

UDC: 621.791.753.01

Card 2/2 pb

PATSKEVICH, I.R.

Using weaving arc hard facing. Avtom. svar. 18 no.4:28-30 Ap '65. (MIRA 18:4)

1. Chelyabinskiy politekhnicheskiy institut.

PATSKEVICH, I.R., kand. tekhn. nauk; POPKOV, A.M., inzh.

Melting characteristics of an electrode wire during automatic hard facing with a weaving arc. Svar. proizv. no.[illegible]

[illegible] Chelyabinskiy politekhnicheskiy institut.

PATSKEVICH, I.R.

Investigating the parameters of electric discharges during hard facing with an electric arc. Avtom.svar. 16 no.5:55-61 My '63. (MIRA 16:11)

1. Chelyabinskiy politekhnicheskiy institut.

PATSKEVICH, I.R., kand.tekhn.nauk; OKOROKOV, A.K., inzh.

Hard facing with a weaving arc in an atmosphere of water vapor.
Svar. proizv. no.3:40-41 Mr '63. (MIRA 16:3)

1. Chelyabinskiy politekhnicheskiy institut.
(Hard facing) (Protective atmospheres)

PATSKEVICH, I.R., kand.tekhn.nauk; BAUTINA, V.A., inzh.

Bronze deposition on steel by a weaving arc. Svar.proizv. no.11: 34-35 N '62. (MIRA 15:12)

1, Chelyabinskiy politekhnicheskiy institut.
(Electroforming)

S/135/63/000/003/010/011
A006/A101

AUTHORS: Patskevich, I. R., Candidate of Technical Sciences, Okorokov, A. K., Engineer

TITLE: Vibration arc hardfacing in water vapor atmosphere

PERIODICAL: Svarochnoye proizvodstvo, no. 3, 1963, 40 - 41

TEXT: To eliminate deficiencies in vibration arc hardfacing in a water jet, such as unstable hardfacing process, chemical heterogeneity of the built-up metal and crystallization cracks, the possibility is shown of performing the process in water vapor atmosphere, and of cooling the part by a separate water jet, remote from the hardfacing area. A special device was used to produce the water vapor (Figure 1). The vapor is supplied to the arc zone with the aid of a special tip fixed on the torch holder (Author's Certificate no. 150558 with priority of August 10, 1961). Experiments were made to determine the coefficients of fusion and hardfacing, and losses of electrode material for splashes. It was found that the coefficient of fusion depends little upon changes in the hardfacing condition parameters. Metal losses decrease at a greater length of

Card 1/2

Vibration arc hardfacing in water vapor atmosphere

S/135/63/000/003/010/011
A006/A101

the vapor jet, lesser wire feed rate, and higher induotance in the circuit. The method assures a stable hardfacing process and built-up layers without cracks, if an electrode wire with higher C content is being used. The hardness of the built-up layer is slightly reduced. There are 3 figures.

ASSOCIATION: Chelyabinskiy politekhnicheskiy institut (Chelyabinsk Polytechnic Institute)

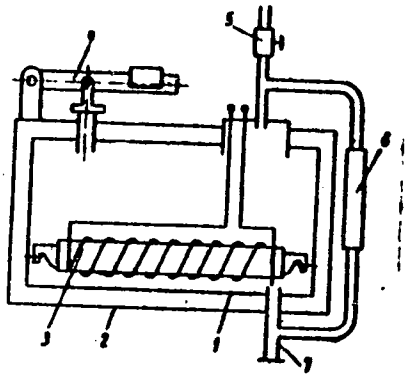

Figure 1. Scheme of vapor producing device
Legend: 1 - container; 2 - heat-insulating casing; 3 - heater; 4 - safety valve; 5 - cock; 6 - water level indicator; 7 - overflow of water.

Card 2/2

BEREZKIN, P.N.; PATSKEVICH, I.R., kand. tekhn. nauk, retsenzent; KOVALENKO, A.V., inzh., red.; DUGINA, N.A., tekhn. red.

[Built-up welding of dies] Naplavka shtampov. Pod red. A.V. Kovalenko. Moskva, Mashgiz, 1961. 27 p. (MIRA 15:4)
(Dies (Metalworking))

GALAKTIONOV, A.T.; DENISOV, Yu.A.; KOPYTOV, G.T.; MASLOV, Yu.A.; NIKONOV, I.P.; PETUNIN, I.V.; KOCHEVA G.N.; KUZNETSOV, A.P.; LELEKO, N.M.; RAZIKOV, M.I.; SPESHKOV, V.V.; STEPANOV, B.V., STEPANOV, V.V., kand. tekhn. nauk; SHELOMOV, B.Ye.; YUNYSHEV, G.P.; YES'KOV, K.A., dots., retsenzent; BAKSHI, O.A., dots., retsenzent; BEREZKIN, P.N., dots., retsenzent; PATSKEVICH, I.R., dots., retsentzent; RUDAKOV, A.S., dots., retsenzent; FIZHBEYN, N.B., inzh., retsenzent; KHRUSTALEV, L.Ya., inzh., retsenzent; KRUTIKHOVSKIY, V.G., inzh., red. BOBROV, Ye.I., kand. tekhn. nauk, red. DUGINA, N.A., tekhn. red.

[Welding handbook] Spravochnik rabochego-svarshchika. Pod red. V.V.Stepanova. Moskva, gos. nauchno-tekhnizd-vo mashinostroit. lit-ry, 1960. 640 p. (MIRA 14:6)
(Welding)

SPIRIDONOV, Aleksandr Aleksandrovich; SEMKIN, Anatoliy Alekseyevich; PATSKEVICH, I.R., kand. tekhn.nauk, retsenzent; KIRILLOV, A.A., inzh., red.; DUGINA, N.A., tekhn. red.

[New equipment for automatic hard facing by semicircular weaving arc] Novoe oborudovanie dlia avtomaticheskoi vibrodugovoi naplavki. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 72 p. (MIRA 14:7)

(Hard facing--Equipment and supplies)

PATSKEVICH, I.R., kand.tekhn.nauk; OKOROKOV, A.K., inzh.; BAUTINA, V.A., inzh.

Investigating the shield effect of liquids in hard facing with a weaving arc. Svar.proizv. no.9:13-16 S '60. (MIRA 13:8)

1. Chelyabinskiy politekhnicheskiy institut.
(Hard facing)

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S/135/60/000/009/004/015
A006/A002

1.2360

AUTHORS: Patskevich, I. R., Candidate of Technical Sciences, Okorokov, A. K., Bautina, V. A., Engineers

TITLE: Investigation Into the Protective Effect of Liquid in Vibro-Arc Building-Up

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 9, pp. 13-16

TEXT: It was previously considered that the use of water as a shielding medium in arc welding was inefficient due to its oxidizing effect on the metal and the increased hydrogen saturation of the metal. The authors present calculational and experimental data characterizing the efficiency of using water for protecting the metal against oxygen and air nitrogen during vibro-arc building-up process. The protective effect of water was determined from the saturation of the metal with nitrogen and from the magnitude of the coefficients of transition of C, Mg and Si from the electrode wire to the built-up metal. Experiments were made using a vibro-arc ВДГ-5 Э (VDG-5E) head on d-c of reversed polarity from two or three series-connected rectifiers. Grade "20" steel specimens of 40 - 50 mm were built-up (welding speed was 58 m/hr; amplitude of electrode vibrations - 2 mm; operational length of the electrode wire:

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Investigation Into the Protective Effect of Liquid in Vibro-Arc Building-Up

9 to 12 mm). The consumption and feed location of the liquid, the average voltage of the arc and the frequency of electrode vibrations varied during the experiments. Figure 1 shows the wire and liquid feed to the part to be welded. Inductivity of the welding circuit was set-up depending on the frequency of electrode vibrations. A chemical analysis was made of metal built-up with 60 and 70 grade steel electrodes and an automatic КУМА-5 (KUMA-5) head, differing from the VDG-5E head by a circular motion of the electrode wire and by the liquid feed supplied in the form of a hollow cone-shaped jet around the electrode. The electrode composition was 0.7% C, 0.86% Mn, 0.30% Si. The welding conditions were: 18 v average arc voltage; 53 m/hr electrode wire feed; building-up speed: 24 m/hr; speed of the circular motion of the electrode tip 46.7 rpm; diameter of the circle described by the electrode tip: 2.5 mm; operational length of the electrode 10 mm; inductivity of the welding circuit 17 - 19 millihenry; the cooling liquid was technical water. The location and angles of the wire feed were the same as in building-up with the VDG-5E head. The water consumption was variable. Tables are given showing the effect of the welding conditions on the saturation of the built-up metal with nitrogen; the average time of the building-up periods and the dependence of the chemical

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A006/A002

Investigation Into the Protective Effect of Liquid in Vibro-Arc Building-Up

composition of built-up metal on the liquid consumption. The dependence of the coefficients of transition of the components on the liquid consumption, the average arc voltage and the vibration frequency of "45Г2" (4502) and 60 steel electrodes are given in graphs. The experiments yielded the following results: Water has essential protective properties. Its use in building-up with vibrating and non-vibrating electrodes reduces the saturation with nitrogen of the built-up metal and the burning-out from the metal of C, Mg, Si and other elements. The degree of the protecting effect depends mainly on the quantity of the water supplied to the arc zone, and on the method and location of feed. The water used in vibro-arc welding is converted into vaporous state in the arc zone. Since the contact of the arc with large water drops impedes the building-up process, the use of steam as a shielding medium supplied to the arc zone is recommended. The built-up metal should be cooled by an individual water jet. There are 3 tables, 4 sets of figures and 7 Soviet references.

ASSOCIATION: Chelyabinskiy politekhnicheskiy institut (Chelyabinsk Polytechnic Institute)

Card 3/3

PATSKEVICH, V. M.

18 27 93

Formulation of crystal lattice defects in germanium by fast-electron bombardment. V. S. Vavilov, L. S. Smirnov, G. N. Galkin, A. V. Spitsyn, and V. M. Patskevich. *Soviet Phys. Tech. Phys.* 1, 1805–8(1956)(English translation); *Zhur. Tekh. Fiz.* 26, 1805–9.—Two changes in mono-cryst. semiconductor properties (elec. cond., detd. by charge carrier d. and carrier mobility; and carrier lifetime) are used to study the no. and type of crystal defects formed by particle bombardment. The scattering of electrons on Ge nuclei when energy transfer is greater than 22.3 e.v. produces acceptor levels. The no. of Frenkel defects produced does not depend on the type of conduction in Ge. Electron bombardment of n Ge causes irreversible changes of the vol. carrier lifetime at room temp. The threshhold electron energy necessary to produce recombination centers inside the crystal is 500 e.kv. Seymour M. Faye.

Distr: 4E2c/4E4j/4E[illegible]

PATSKEVICH, V.M.

USSR/Electricity - Semiconductors

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 12183 G-3

Author : Vavilov, V.S., Smirnov, L.S., Galkin, G.N., Spitsyn, A.V., Patskevich, V.M.

Inst : Physics Institute, Academy of Sciences, USSR, Moscow.

Title : Formation of Defects of Crystalline Lattice in Germanium Upon Bombardment by Fast Electrons.

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 9, 1865-1869

Abstract : Thin (50 microns) platelets of single-crystal n-germanium with bombardment of monoenergetic electrons with energies from 400 to 1000 kev. The concentration of the lattice defects arising thereby was calculated from the variation in the specific resistivity ρ of the specimens before and after the irradiation. The threshold value of the energy W_{min}, starting with which ρ increases upon

Card 1/2

USSR/Electricity - Semiconductors

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 12183

irradiation, is 500 ± 20 kev. A table is given, containing data of measurements of the dependence of the specific conductivity σ of the specimens on W, and on the dose of fast electrons. The corresponding transverse cross sections Σ for the formation of centers that remove the electrons from the conduction zone are calculated. The agreement between experimental data with the theoretical ones, obtained from the Mott formula for the integral Σ of the scattering of relativistic electrons, is explained by the fact that each Frankel defect in n germanium corresponds to one effective acceptor level.

The electron bombardment causes also an irreversible change in the bulk lifetime (at room temperature), starting with the same value W_{min}. However, the availabe data are insufficient for identifying the recombination centers with the levels that remove the electrons from the conduction zone.

Card 2/2

PATSKEVICH, V.M.

USSR/Electricity - Semiconductors G-3

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 1303

AUTHORS Fatskevich, V.M., Vavilov, V.S., Smirnov, L.S. 56-3-43/59

TITLE Electron Ionization Energy in Silicon Crystals. (Energiya ionizatsii elektronami v kristallakh kremniya) (Letter to the Editor)

PERIODICAL Zhurnal Eksperim.i Teoret.Fiziki, 1957, Vol 33, Nr 3, pp 804-805 (USSR)

ABSTRACT The "multiplication coefficient" β of the charge carriers was measured on a silicon monocrystal of the P-type with P-N-transitions. Irradiation by electrons with an energy of from 10 to 30 keV took place vertically to the N-type side of the crystal, but parallel to the P-N-transitions. From the coefficient β measured the quantity $\mathcal{E}$ was determined as $4,2 \pm 0,6$ eV.
There are 2 figures and 5 Slavic references.

ASSOCIATION Physics Institute im.P.N.Lebedev of the A.N. of the U.S.S.R. (Fizicheskiy institut im.P.N.Lebedeva Akademii nauk SSSR).

SUBMITTED June 15, 1957
AVAILABLE Library of Congress.

Card 1/1

PATSKEVICH, V.M.

537.873 : 537.533.02

3690. ENERGY OF IONIZATION BY ELECTRONS IN CRYSTALS OF GERMANIUM. V.S. Vavilov, L.S. Smirnov and V.M. Patskevich. Dokl. Akad. Nauk SSSR, Vol. 112, No. 6, 1020-2 (1957). In Russian.

The ionization energy in Ge due to bombardment by 5 to 15 keV electrons was measured at pressures of 10^{-6} to 10^{-1} mm Hg. A value of 3.7 ± 0.4 eV was found. No variation with pressure, energy of primary electrons or surface treatment was observed.

I.B. Arthur

AUTHORS: Vavilov, V. S., Smirnov, L. S., Spitsyn, A. V., 57-28-5-6/36
Patskevich, V. M., Galkin, G. N.

TITLE: On Defects in a Crystal Lattice in n-Germanium (O defektakh kristallicheskoy reshetki v germanii N-tipa)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 5, pp. 960-961 (USSR)

ABSTRACT: In the previous paper the authors communicated the investigation results of germanium crystals of the n- type subjected to an electron bombardment with energies ranging from 0,4 to 1 MeV (Ref 1). There, the experimentally determined modifications of the specific resistance with respect to the energy and the amount of fast electrons, was opposed to the theory of defect formation because of an electron dispersion by means of germanium nuclei by Frenkel'. V. V. Galavanov to whom the authors are indebted, indicated a numerical error. This error was committed in the computation of the integral cross-sections $\sum_{\theta_{min}}^{\pi}$ of electron dispersion on a nucleus at all angles from π to the angle θ_{min} at which the electron transfers the minimum energy to the nucleus necessary for the formation of a defect. The newly computed theoretical values of $\sum_{\theta_{min}}^{\pi}$ corresponding to

Card 1/2

On Defects in a Crystal Lattice in n-Germanium

57-28-5-6/36

a threshold energy of 500 keV as well as the experimentally determined sections Σ of center formation, which remove the electrons from the conduction zone are given in the table. From this follows, that the experimental values, which have been obtained in the mentioned paper and which were verified by subsequent experiments, do not correspond to the conception that at energies W varying from the threshold energy (W = 0,5 MeV) to W = 0,96 MeV the constant defects in n-type germanium are produced according to the law $\sum_{\theta_{min}}^{\Pi} = f(W)$

It is intended to conduct in the near future experiments with n-type crystals with strongly differing Fermi levels and to determine, whether the difference between theory and experiment is dependent upon the low degree of filling of the capture centers. There are 1 table and 1 Soviet reference.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR, Moskva(Physical Institute imeni P. N. Lebedev AS USSR, Moscow)

SUBMITTED: January 18, 1958

Card 2/2 1. Germanium crystals--Analysis

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SOV/181-1-9-25/31

AUTHORS: Vavilov, V. S., Smirnov, L. S., Patskevich, V. M.

TITLE: On the Diffusion Length of Charge Carriers in Silicon Photoelements

PERIODICAL: Fizika tverdogo tela, 1959, Vol 1, Nr 9, pp 1465 - 1467 (USSR)

ABSTRACT: The thermal procedure applied in the production of silicon photoelements leads to a decrease in the diffusion length L of the carriers. Certain difficulties, discussed in the introduction, occur in the determination of L and the carrier lifetime in the case of a p-type layer being situated below an n-type layer. The authors therefore made other experiments in order to determine the diffusion lengths, offering results which are independent of the method, the influence of the traps, and the surface recombination. A semiconductor crystal with p-n junction and nonrectified contacts A and B (cf. figure 1) is considered. The light incident upon the surface is characterized by its reflection coefficients R and the surface recombination rate s; it induces electron-hole pair production in the crystal. If $k^{-1} \ll d$ (k - absorption coefficient, d - thickness of the p-type layer), practically all

Card 1/2

On the Diffusion Length of Charge Carriers in Silicon SOV/181-1-9-25/31
Photoelements

pairs originate in the vicinity of the surface. Furthermore if L < d, the collection coefficient is $\alpha = [I/qN_{h\nu}(1-R)]$ or $\alpha = 2\exp(-d/L)/(1 + SL/D)$, where D is the carrier diffusion coefficient. For two different d-values d_1 and d_2 the ratio of short-circuit currents is equal to $I_1/I_2 = \alpha_1/\alpha_2 = \exp(\frac{d_2 - d_1}{L})$ and $L = (d_2 - d_1)/(\ln I_1 - \ln I_2)$. By means of the latter formula the diffusion lengths of various samples were calculated from the experimentally obtained data and compiled in a table. The single silicon crystal samples had a resistivity of 8.5 - 8.9 ohm.cm, a lifetime > 30 μ sec and a primary diffusion length of 300 μ. Figure 2 illustrates the experimental setup. The change of d was made by grinding by 50 μ. The exciting light had a wavelength of 0.9 μ. There are 2 figures, 1 table, and 2 references, 1 of which is Soviet

ASSOCIATION: Fizicheskiy institut im P.N Lebedeva AN SSSR Moskva (Institute of Physics imeni P.N. Lebedev of the AS USSR, Moscow)

SUBMITTED: April 6, 1957

Card 2/2

Vavilov

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B006/B070

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AUTHORS. Vavilov, V. S., Batskevich, V. M., Yurkov, B. Ya., Glazunov, P. Ya.

TITLE: The Effect of Fast Electron Bombardment on the Electrical Conductivity of Silicon and the Dependence of the Rate of Defect Formation on the Orientation of the Crystal Relative to the Electron Beam

PERIODICAL. Fizika tverdogo tela, 1960, Vol. 2, No. 7, pp. 1431-1435

TEXT: A determination of the minimum kinetic energy of electrons necessary for the production of stable structural defects in crystals, is of importance for the possible application of semiconductors as particle counters, and for transformation of nuclear radiation energy. To obtain new data on defect formation, the authors investigated it in p-type silicon by bombarding rectangular single crystals oriented at different angles relative to the incident beam of 500-kev electrons. Before their radiation the samples had a homogeneous resistivity ρ of 60 ohm.cm

Card 1/4

82534

The Effect of Fast Electron Bombardment on the Electrical Conductivity of Silicon and the Dependence of the Rate of Defect Formation on the Orientation of the Crystal Relative to the Electron Beam

S/181/60/002/007/009/042
B006/B070

Bombardment and the subsequent measurement of potential distribution were done at room temperature. The crystals were water-cooled during the bombardment. Measurements of the Hall effect showed that the carrier mobility changed only slightly as a result of bombardment. To investigate the depth distribution of the defects produced, a comparison was made between the potential distribution curves along the direction of the incident beam for irradiated and unirradiated samples. Fig. 1 shows the curves $\varphi(x)$ for three samples bombarded in the directions ⟨111⟩, ⟨110⟩, and ⟨100⟩, respectively. x denoting the depth of penetration of the electron beam. The maximum depth of penetration for which a change in φ could be established, was 0.6 mm irrespective of the orientation. On bombardment in the ⟨111⟩ direction, the surface of the sample showed a larger change in resistivity than for the other two directions. Further, the experimental and theoretical values of the minimum electron energy are compared. Two theoretical values are investigated.

Card 2/4

The Effect of Fast Electron Bombardment on the Electrical Conductivity of Silicon and the Dependence of the Rate of Defect Formation on the Orientation of the Crystal Relative to the Electron Beam

S/181/60/002/007/009/042
B006/B070

E'_{min} = 280 kev (Ref. 3) and E''_{min} = 145 kev (Ref. 2 and the present paper). A comparison with the experiments of the authors (Fig. 2) shows that there is a much better agreement with the E''_{min} curve. For E''_{min} = 145 kev, the rate of defect formation is $A_d(0) \simeq 2.9$ cm^{-1}, and the rate of removal of the holes is $A_p(0) \simeq 1.4 \cdot 10^{-3}$ cm^{-1}. Hence, $A_p/A_d \simeq 5 \cdot 10^{-4}$ is the average number of trapped carriers corresponding to the theoretically calculated value of defect concentration. The effects observed are finally discussed. The authors thank T. M. Kopylova for her calculations. There are 2 figures and 10 references: 3 Soviet and 7 US.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR Moskva (Institute of Physics im. P. N. Lebedev of the AS USSR, Moscow)

S/064/61/000/001/011/011
B132/B218

AUTHOR: Patskevich, V. M.

TITLE: All-Union Conference on Ultrasound

PERIODICAL: Khimicheskaya promyshlennost', no. 1, 1961, 72-73

TEXT: From November 22 to 26, 1960, the All-Union Scientific and Technical Conference on Industrial Application of Ultrasound was held in Moscow. 1,600 delegates attended the Conference, among them representatives of industry, scientific laboratories, planning organizations, and of the Council of National Economy. A total of 130 lectures and reports were read at the Conference. The deputy chairman of the Gosudarstvennyy nauchnyy-tekhnicheskiy komitet Soveta Ministrov SSSR (State Scientific and Technical Commitee of the Council of Ministers USSR) G. V. Aleksenko, opened the Conference. In his opening speech he pointed out that the application of ultrasound in industry, science and technology is of great importance. The welcoming address was delivered by Academician A. I. Berg. Professor L. D. Rozenberg reported on new applications of ultrasound in physics. After Professor

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All-Union Conference on Ultrasound S/064/61/000/001/011/014
B132/B218

Rozenberg's speech, four reviewing reports were delivered: " The present stage and the prospects of development in the application of ultrasound in machine building" (Yu. I. Kitaygorodskiy); "Problems of industrial use of ultrasound in chemical technology" (V. M. Fridman); "Basic problems in the production of sources of ultrasonic energy" (D. E. Kondras); "Use of ultrasound for control purposes" (O. I. Babkov). In the first section of the Conference, "Application of ultrasound in the technology of machine building", the applications of ultrasound were discussed in a number of reports. Intensification of electrochemical processes, welding and soldering of metals and plastics, use of ultrasound for mechanical treatment, and its use in metallurgy. In the second section, "Application of ultrasound in chemical technology", L. I. Kondakova and V. M. Fridman reported on the rules governing the influence of ultrasound on dispersion. Among other things, attention was drawn to the use of ultrasound in crystallization, coagulation, drying and filtration. A. I. Kapustin and Yu. N. Tyurin dealt with the application of ultrasound for crystallization and dissolution. M. S. Akutin stressed the applicability of ultrasound in the production of block and graft polymers, which

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otherwise cannot be synthesized. S. P. Kirichenko spoke about the use of ultrasound for intensifying thermal cracking. In this connection, experiments made at the Lisichanskiy khimicheskiy kombinat (Lisichansk Chemistry Combine) were mentioned. Ye. G. Tokar' reported on the use of ultrasound for accelerating washing and dyeing processes, and on its influence upon heterogeneous diffusion processes. G. N. Gasyuk dealt with the possible use of ultrasound in purification processes. M. Ye. Arkhangel'skiy, B. F. Podoshevnikov, V. P. Kurkin, and M. N. Varlamov developed ultrasonic methods to be used for the coagulation of aerosol. This method allows waste gases to be easily purified from chlorine compounds and hydrogen oxides. Thus, the above-mentioned scientists were successful in removing 80 to 95 % fluorine by applying a frequency of 16.5 kc/sec and an intensity of 155 db, the purification reaction taking only 4 seconds. Conventional methods permitted a removal of 42 - 69 % of fluorine only. T. I. Mashkova and Yu. Ya. Borisov spoke about the use of ultrasound in accelerating drying processes. I. A. Malakhovskiy discussed the possible use of sonic and ultrasonic waves in filtration of suspensions. In the third section, "Sources of ultrasonic energy", several magnetostriction, piezoceramic, hydrodynamic, and aerodynamic ultrasound generators were

dealt with. In the fourth section, "Use of ultrasound for measuring and control purposes", problems of controlling and analyzing technical processes by means of ultrasound were discussed. Together with the third section, the fourth section discussed "Methods for measuring the acoustic power fed by transformers to liquids". The Conference has shown that the use of ultrasound in industry and science plays an important role. The delegates also visited a special exposition of new apparatus and technical devices for the use of ultrasound. This exposition had been arranged in the pavilion "Mashinostroyeniye" (Machine Building) of the VDNKh (Exposition of the Achievements of National Economy).

S/089/61/010/004/026/027
B102/B205

AUTHORS: Patskevich, V. M., Perepletchikov, S. A.

TITLE: Thematic Exposition "Use of Radioisotopes for the Control and Automation of Manufacturing Processes"

PERIODICAL: Atomnaya energiya, v. 10, no. 4, 1961, 412-415

TEXT: In a special exposition which was held in Moscow from November 1960 to February 1961 within the framework of the Exposition of the Achievements of the USSR Economy, apparatus, equipment, and illustrations of the applications of radioisotopes in the control of manufacturing processes were on show in the pavilion "Peaceful Use of Atomic Energy". A detailed account on the Exposition is presented in this article. The Exposition was divided into several sections. The first section was devoted to non-contact level gauging and surface regulation of several substances. Level meters and gamma relays were on show. They have been developed by NIITeplopribor, the Institut avtomatiki Gosplana Ukrainskoy SSR (Institute of Automation of Gosplan Ukrainskaya SSR), TsNIIChermet, and others, and were built by the "Kaluga-pribor" Plant, the Tallinskiy opytnyy zavod KIP

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(Tallin Pilot Plant of KIP), and other manufacturers. Apparatus still being in the test stage were also exhibited, such as a device for continuous level gauging of blast-furnace charges, which has been developed by TsNIIChermet in cooperation with UkrNII chernoy metallurgii (Ukrainian Scientific Research Institute of Ferrous Metallurgy) and Dneprovskiy metallurgicheskiy zavod im. F. E. Dzerzhinskogo (Dnepr Metallurgical Plant imeni F. E. Dzerzhinskiy); a level regulator for liquid metal, type УРЖ-6 (URZh-6), developed by TsNIIChermet (accuracy: ± 2 mm); and a plant crusher developed by Nauchno-issledovatel'skiy gornometallurgicheskiy institut Armyanskoy SSR (Scientific Research Institute of Mining Metallurgy Armyanskaya SSR). Moskovskiy avtozavod im. I. A. Likhacheva (Moscow Automobile Plant im. I. A. Likhachev) showed devices and circuit diagrams for control and automation of manufacturing processes. The second section of the Exposition was devoted to non-contact control and regulation of density, concentration, pressure, and humidity. The exhibits included a gamma ground-meter which has been used in the construction of the Stalingrad GES (hydroelectric power plant). About 30 gamma ground-meters, type ГК-1584 (GK-1584), designed by TsPKB Ministerstva rechnogo flota RSFSR (TsPKB of the Ministry of the River Fleet RSFSR), are now available for

soil investigations in rivers. The third section was devoted to "non-contact control and regulation of thicknesses and weights". Among other things, thickness gauges of the types ИТУ-495 (ITU-495) and ИТШ-496 (ITSh-496) were shown, which are designed for measuring and regulating the thickness of sheet (0.03 - 1 mm) with an accuracy of ± 1.5 %. The device РОТОР-3 (ROTOP-3), designed by Makeyevskiy nauchno-issledovatel'skiy institut (Makeyevka Scientific Research Institute) and built by Khar'kovskiy zavod marksheyderskikh instrumentov (Khar'kov Plant for Mine-surveying Instruments), can be used to measure the thickness of coal seams in the drift. A radioactive pickup, developed by Institut gornogo dela AN SSSR (Mining Institute AS USSR), is intended for preventing averages. Based on this instrument an automatic controller has been built and tested. The fourth section showed radioactive apparatus acting as relays which were composed of standardized units. They were manufactured by the Tallin Pilot Plant of KIP, by SKB Rizhskogo zavoda "Avtoelektropribor" (SKB of the Riga Plant "Avtoelektropribor"), the Institut fiziki AN Latviyskoy SSR (Institute of Physics, AS Latviyskaya SSR), and others. With the help of such a device, the Latvian sovnarkhoz, e.g., was able to save an amount of 1.5 million rubles per year. The fifth section was devoted to "radio-

isotopes for use in quality control of materials and products, and in the investigation of physico-chemical processes". The section showed various gamma flaw detectors, such as the type РДБ-2 (RDB-2) manufactured by Moskovskiy filial instituta Orgenergostroy (Moscow Branch of the Institute Orgenergostroy). This instrument is used as a thickness gauge, and is able to detect flaws and cracks not larger than 1.5 - 2 % of the measured thickness, and that even in 60-cm concrete reinforced up to 100 kg/m^3. Zavod transportnogo mashinostroyeniya im. V. A. Malysheva (Transport Machinery Plant im. V. A. Malyshev) uses isotopes for many purposes. A special section demonstrated the applications of radioisotopes in prospecting and exploiting useful minerals. The exhibits included devices used in the petroleum industry, as well as apparatus and methods for rapid determination of the content of Be, B, and Li in ores, such as the device ВИМС-58 (VIMS-58) developed by Vsesoyuznyy institut mineral'nogo syr'ya (All-Union Institute of Mineral Raw Materials) for comprehensive analysis of ores in the open air. The great success achieved by the "Azneftegeofizika" Trust and Volgo-Ural'skiy filial VNII-Geofiziki (Volga-Ural Branch of VNII Geophysics) in the application of radioactive methods is mentioned. A special exposition illustrated the activities of Vsesoyuznaya kontora

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"Izotop" (All-Union Office "Isotope"), and another show was devoted to radiation protection and safe handling of radioisotopes. The total exposition showed about 150 exhibits from 138 organizations.

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PATSKEVICH, V.M.

Conference on the irradiation of seeds before sowing. Atom.energ. 10 no.5:549-551 My '61. (MIRA 14:5)
(Plants, Effect of radiation on)
(Seeds)

S/089/61/011/002/015/015
B102/B201

AUTHOR: Patskevich, V. M.

TITLE: Conference on methods of nondestructive control

PERIODICAL: Atomnaya energiya, v. 11, no 2, 1961, 192-194

TEXT: The nauchno-tekhnicheskoye soveshchaniye po fizicheskim metodam kontrolya materialov (Scientific and Technical Conference on physical methods of material control) took place in Leningrad in April, 1961. It had been organized by the Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta ministrov SSSR (State Scientific and Technical Committee of the Council of Ministers USSR) (GNTK), the Leningradskoye nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti (Leningrad Scientific and Technical Society of the Instrument Construction Industry), the Leningrad sovnarkhoz, and the Leningrad House for the Dissemination of Scientific and Technical Knowledge. The conference was attended by 900 people from 47 cities of the country; 200 industrial enterprises working with methods of nondestructive material control were represented. 95 lectures were delivered, six of them at plenary meetings. L. I. Loginov (GNTK) spoke about

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Conference on methods of nondestructive ...

the application and development of the physical method of nondestructive material control in industry; P. K. Oshchepkov (Moscow) dealt with problems of development of such methods; S. T. Nazarov (Moscow) spoke on problems of automatic material control by means of X-rays; L. G. Merkulov et al. (Leningrad) on automation of ultrasonic control; Ye. S. Lev (Leningrad) on the classification of methods of nondestructive material control (classification into six principal groups); M. Ye. Krasno (Kishinev) on a device mass-produced by the factory "Elektrotochpribor" and serving for defectoscopic examinations; O. M. Ignat'yeva and D. S. Gerchikov (Stalino) on experience made with gamma defectoscopy in enterprises of the Stalino sovnarkhoz (discussion of results of work performed with an automatic gamma defectoscope of the type ИД-3 (ID-3) and a stationary industrial device of the type ГУП-Со (GUP-Co) which uses Co^{60}); A. A. Vorob'yev, V. I. Gorbunov, and G. N. Kok (Tomsk) on the development of new betratrons and their utilization in industrial defectoscopy (description of a new 25-Mev betratron; bremsstrahlung intensity 60-70 r/min at a distance of 1 m from the target); Zh. V. Ostapenko (Kiyev) on nondestructive material control in Kiyev's industry; A. A. Rusanov (Zhdanov) on the application of gamma defectoscopy in the heavy industry; V. M. Fedorchuk (Dnepropetrovsk) on radiography in metal construction plants; application of a УЗД-7Н (UZD-7N) ultrasonic

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S/089/62/012/001/016/019
B102/B158

AUTHOR: Panskevich, V. M.

TITLE: The "Peaceful uses of atomic energy" pavilion in the VDNKh SSSR in 1961

PERIODICAL: Atomnaya energiya, v. 12, no. 1, 1962, 74

TEXT: Among the new protective suits shown the following were of special interest: A pneumatic suit, ЛГ-5 (LG-5), for use in repair, breakdown and contamination work where the air is highly contaminated. It is made of frost-proof (-30°C), strong and easily cleaned PVC reinforced by a caprone network. Unlike the ЛГ-4 (LG-4) it has a removable sight glass and a modified fastener. A protective suit type ЛИЗ-КС (LIZ-KS) which is designed for use when welding and cutting contaminated metal. It has a fresh-air supply of 150 - 300 liter/min. A new polyvinylchloride plastic which is easily decontaminated. It is used for covering floors etc. and is produced in 12-m rolls (1.2 m wide), or sheets, 2-mm thick (650·700 and 980·900 mm)or 0.5 and 0.7 mm thick and not less than 700 mm broad, for walls and ceilings. A 0.3-mm polyvinylchloride film for

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PATSKEVICH, V.M.

International Symposium on Radiochemistry. Atom. energ. 14 no.6: 595-596 Je '63. (MIRA 16:7)
(Radiochemistry--Congresses)

L 10683-63 EWP(j)/EPF(c)/EWT(m)/BDS—AFFTC/ASD—Pc-4/Pr-4—RM/WW
ACCESSION NR: AP3002275 S/0089/63/014/006/0595/0596

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AUTHOR: Peiskyich, V. M.

TITLE: International symposium on radiation chemistry, held in Tihany, Hungary, September 1962

SOURCE: Atomnaya energiya, v. 14, no. 6, 1963, 595-596

TOPIC TAGS: conferences, radio chemistry, radiation polymerization, gas chromatography

ABSTRACT: Thirty scientists, representing 9 countries, participated. The symposium took place in Tihany, Hungary, in September 1962. A. Shapiro (France), D. Kerki (Hungary), L. Kish, A. N. Pravednikov and S. S. Medvedev (SSSR), V. V. Voyevodskiy (SSSR), Ya. Dobo and A. Shokody (Hungary), R. Roberts (Great Britain), Ya. Gryag and E. Shigaliyevich (Poland), Y. Ziolinskiy (Poland), Z. N. Tarasova, V. G. Kozlova and R. A. Dyadkina (SSSR), A. S. Kaz'minskiy (SSSR), L. Wuckel, L. Savchenko, and A. Zaidel (East Germany), A. Charlsby (Great Britain), S. Toriscu and A. Kelusharu (Roumania), E. M. Manolashvili (SSSR), Yu. L. Khmel'nitskiy (SSSR) reported on problems mainly from the field of radiation polymerization. Some papers were dedicated to the utilization of gas chromatography for radiochemical research.

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S/089/63/014/003/017/020
B102/B186

AUTHOR: Patskevich, V. M.

TITLE: Soveshchaniye po radioaktivatsionnomu analizu (Conference on Activation Analysis) in Tashkent

PERIODICAL: Atomnaya energiya, v. 14, no. 3, 1963, 328 - 330

TEXT: The Conference was held in October 1962 as organized by the Nauchnyy sovet po ispol'zovaniyu atomnoy energii v khimii Otdeleniya khimicheskikh nauk AN SSSR (Scientific Council on the Utilization of Atomic Energy in Chemistry of the Department of Chemical Sciences AS USSR), the Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy AS USSR) and the Institut yadernoy fiziki AN Uzbekskoy SSR (Institute of Nuclear Physics AS Uzbekskaya SSR). The following from among more than 30 lectures are here briefly reviewed: I. P. Alimarin and Yu. V. Yakovlev, development and present state of activation analysis; D. I. Leypunskiy, review on neutron activation analysis in geology; Ye.M. Lobanov, A. P. Novikov, A. A. Khaydarov, A. I. Chanyshev, M. G. Ashirov, A. Khudaybergenov, determination of copper in core samples by neutron activation analysis; G. Aripov,

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Soveshchaniye po ...

B. A. Krylov, N. S. Matveyev, Ye. M. Lobanov, M. M. Romanov, A. A. Khaydarov, investigation of the spectra of thermal neutron radiative capture by minerals and rocks; I. N. Plaksin, L. P. Starchik, detection of elements in ores and dressing products by their activity; V. V. Sulin, activation method for rock analyses; Ye. M. Lobanov, V. I. Zvyagin, V. M. Lenchenko, B. P. Zverev, D. I. Blinkov, determination of boron by thermal-neutron radiative capture analysis: Ye. M. Lobanov, A. I. Chanyshev, A. G. Dutov, M. G. Ashirov, A. Khudaybergenov, activation mass analysis of China clays; S. A. Dubinskiy, V. T. Tustanovskiy, quantitative determination of In and Mn in ores by activation analysis; G. A. Perezhogin, determination of gold traces in ores and sediments by neutron activation analysis; M. B. Shiryayeva, Yu. P. Salmin determination of Ta in ores, rocks, and minerals by neutron activation analysis; V. I. Spitsyn, N. P. Glazunov, P. N. Kodochigov, V. I. Konov, determination of impurities in vanadium; N. N. Dogaakin, M. N. Shulepnikov, Yu. V. Yakovlev, impurity determinations in various substances; N. A. Glukharev, activation γ-analysis of micro-impurities in semiconductors; Ye. I. Isayeva, I. Ye. Makasheva, A. P. Obukhov, silicon carbide analysis by neutron activation; V. V. Moiseyev, R. A. Kuznetsov, A. I. Kalinin, activation analysis of SiO_2; T. A. Potapov

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and T. V. Poleshchuk, activation analysis of high-purity aluminum; L. A. Smakhtin and N. V. Fillippova, determination of Mn and Br in benzene by activation analysis; V. I. Shamayev, determination of nitrogen in organic compounds by fast-neutron activation analysis; I. A. Maslov and A. P. Obukhov, exact determination of material transfer of hot cathodes (zirconium carbide) by gamma spectroscopy after neutron irradiation; analysis modelling method; A. G. Dutov, Ye. M. Lobanov, determination of purity of yttrium oxide; G. V. Sukhov, P. Ya. Vertebnyy, G. V. Balakin, N. I. Marunina, S. A. Mirza-Zade, new variants of activation analyses of high-purity substances and rare metals. At the end of the Conference the thematic plans for 1963 were dealt with.

PATTANTYUS, G.A. DECEASED

see ILC

PATTANTYUS-ABRAHAM, Adam

Reconstruction of the "Voros Csillag" motion picture theater.
Magy ep ipar 11 no.7:327-329 '62.

PATTANTYUS-ABRAHAM, A.

Collection of formulas concerning the strain and stress conditions of rectangular plane plates with loading of variable intensity according to the sine and cosine lines. p. 301.

MAGYAR TUDOMANYOS AKADEMIA. MUSZAKI TUDOMANYOK OSZTALYA. KOZLEMENYEI.
Budapest, Hungary. Vol. 24, no. 1/4, 1959.

Monthly List of East European Accessions. (EEAI) LC Vol. 9, no. 2, Feb. 1960 Uncl.

PATTANTYUS-ABRAHAM, Edit

Reviews of periodicals on founding. Koh lap 93 no.5: Suppl. Ontode 11 no.5:119-120 My '60.

PATTANTYUS-ABRAHAM, Edit

Reviews of periodicals on founding. Koh lap 93 no.7: Suppl: Ontcde 11 no.7:167-168 Jl '60.

PATTANTYUS-ABRAHAM, Edit

Reviewing periodicals on foundries. Koh lap 95 no.3: Supplement: Ontode 13 no.3: 58,66,70-72 Mr '62.

LEVI, L.I.; PATTIKHAL, Pratap Sh.

Effect of nitrogen on the formation of a chill layer and a transition zone in gray cast iron. Izv. vys. ucheb. zav.; chern. met. 8 no.5:168-172 '65. (MIRA 18:5)

1. Moskovskiy institut stali i splavov.

EXCERPTA MEDICA Soc.7 Vol.10/3 Pediatrics March56

587. PATTOVÁ M. *Infekční lymfocytosis. Infectious lymphocytosis CSL.
PEDIAT. 1955, 10/4 (274-277) Graphs 1

The epidemic developed in a children community (children's home) in Prague. The examination of 128 children revealed 35 cases. Simultaneously some children had influenza (Hirst's reaction strongly positive) and some dysentery type Flexner. The majority of the children showed no clinical symptoms. In all patients examination of the blood showed a high lymphocytosis with eosinophilia. At the same time there was a low number of monocytes, sometimes they were completely lacking. The puncture of the bone marrow did not show any deviation from normal condition.

Bogdanowicz - Warsaw

KROO, H. A., As., MUDr.; PATTOVA, M., MUDr.

Measles encephalitis. Cesk. pediat. 11 no.9:687-690 Sept 56.

1. I. infekcni klinika Praha 8-Bulovka.
(MEASLES, compl.
encephalitis (Cz))
(ENCEPHALITIS, in inf. & child
measles encephalitis (Cz))

TOMANEK, A.; STYBLO, K.; PATTOVA, M.

Bronchoscopy and anesthesia in tetanus patients treated by curariform drugs with the use of Engström's respirator. Cesk.otolar. 8 no.5:261-263 O '59.

1. Vyzkumny ustav tuberkulozy v Praze, red.doc.dr. R. Krivinka -- Klinika infekcni hyg.fakulty, predn.doc.dr. V. Kredba.
(TETANUS ther.)
(MUSCLE RELAXANTS ther.)
(RESPIRATORS)
(BRONCHOSCOPY)

PATTOVA, M.; KROO, H.A.

Tuberculin tests during measles. Cesk. pediat. 12 no.2: 128-131 Feb 57.

1. Inf. klinika Praha 8, predn. prof. Dr. J. Prochazka. Inf. odd. Praha 8, predn. doc. Dr. V. Kredba.

(TUBERCULIN REACTION
in measles (Cz))
(MEASLES
tuberculin reaction, results (Cz))

PATTOVA, MUDr.

KROO, A.V., MUDr. As.; PATTOVA, MUDr. as.

Pneumonia with measles. Cesk. pediat. 10 no.2:93-97 Mar 55.

1. 2 inf. klin. Praha 8- Bulovka (predn. prof. Dr. J.Prochazka)
2 inf. klin. Praha 8- Bulovka (predn. doc. Dr. V.Kredba)
(PNEUMONIA, infant and child
complicated by measles, clin. picture)
(MEASLES, complications
pneumonia, clin. picture)

PATTOVA, MUDr; SEIDLER, MUDr

Clinical course of virologically verified influenza during the epidemic of 1954. Prakt. lek., Praha 34 no.20:461-462 20 Oct 54.

1. Inf. odd. nem. Praha VIII (predn. doc. Dr V.Kredba)
(INFLUENZA.,
clin. aspects)

PATTOVA, As. MUDr

Infectious lymphocytosis. Cesk.pediat. 10 no.4:274-277 May 55.

1. Inf. odd. Bulovky, predn.: doc. MUDr V.Kredba.
(LYMPHOCYTOSIS,
infect. in inf. and child.)